

In the Claims:

Please amend claim 17. This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A mechanism that can maintain a constant force comprising:
 - an input groove;
 - an output groove;
 - said input groove operably coupled to said output groove;
 - an input cable secured to said input groove;
 - an output cable secured to said output groove;
 - said input cable adapted to be secured to a source of force; and
 - said output cable adapted to output a constant force.
2. (Original) The mechanism of claim 1 wherein said input groove spirals outwardly in a direction that is opposite to a direction that said output groove spirals outwardly.
3. (Original) The mechanism of claim 1 wherein said input groove and said output groove are positioned back-to-back.
4. (Original) The mechanism of claim 1 wherein said input groove spirals outwardly with an ever increasing radius and the output groove spirals outwardly with an ever increasing radius.
5. (Original) The mechanism of claim 1 wherein said input groove spirals outwardly in a counter-clockwise manner and said output groove spirals outwardly in a clockwise manner.
6. (Original) The mechanism of claim 1 wherein said input groove spirals outwardly in a counter-clockwise manner and said output groove spirals outwardly in a clockwise manner and said input groove is mounted on a back of said output groove.
7. (Original) The mechanism of claim 1 wherein said input groove spirals outwardly and said output groove spirals outwardly, in a manner such that said output cable produces a constant output force.

8. (Previously Presented) The mechanism of claim 1 in combination with a linear extension spring to provide a source of force.
9. (Original) The mechanism of claim 1 wherein said shape of at least one of the input groove and the output groove is defined by a torque profile.
10. (Original) The mechanism of claim 1 wherein said shape of at least one of the input groove and the output groove is defined by a torque profile which is parabolic.
11. (Original) The mechanism of claim 1 wherein said shape of at least one of the input groove and the output groove is defined by a torque profile that is a composite of a line, a constant, and a curve that is tangent to the line and the constant.
12. (Original) The mechanism of claim 1 wherein said input groove and said output groove are torsionally coupled together.
13. (Canceled)
14. (Original) A mechanism that can maintain a constant force comprising:
an input groove;
an output groove;
said input groove operably coupled to said output groove; and
wherein said input groove spirals outwardly in a counter-clockwise manner and said output groove spirals outwardly in a clockwise manner and said input groove is operably coupled to a back of said output groove.
15. (Original) The mechanism of claim 14 including an adjustable spring end plug operably connected to a cable mounted in said input groove.
16. (Original) The mechanism of claim 14 including an adjustable spring end plug operably connected to a cable mounted said input groove, which adjustable spring end plug has an adjustable spring constant.

17. (Currently Amended) A spring end plug comprising:
a plug;
a thread described on said plug;
a spring
said plug adapted to be mounted onto [[a]] the spring with said thread adapted to be screwed on to
the spring; and
a mechanism that is adapted to allow a load to be applied through the plug;
wherein a counter force applied by the spring in response to the load is adjustable by
repositioning the plug along the spring.
18. (Original) The spring end plug of claim 17 wherein said plug has a flat side adapted to be located
away from a spring and said mechanism is located in a center of said flat side.
19. (Original) The spring end plug of claim 17 which can be used to adjust the spring constant of a
spring by rotating the end plug relative to a spring.
20. (Original) The spring end plug of claim 17 having a cylindrical wall with said thread mounted on
one of an inside of said cylindrical wall and an outside of said cylindrical wall.
21. (Canceled)

22. (Previously Presented) A mechanism that can maintain a constant force comprising:
a pulley including an input groove and an output groove;
an input cable having a first end coupled to the input groove and a second end connected with a
spring;
an output cable having a first end coupled to the output groove; and a second end extending from
the first end;
wherein the pulley is adapted to transfer a constant force to the second end of the output cable;
and
wherein the input groove and the output groove are shaped according to a characteristic of the
spring.

23. (Previously Presented) The mechanism of claim 22, further comprising:
an adjustable end plug connected between the input cable and the spring;
wherein the adjustable end plug includes a helical groove within which a coil of the spring is
receivable; and
wherein the adjustable end plug can be threaded along the coil of the spring to adjust the
characteristic of the spring.